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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/813,004 | 03/31/2004 | Nobuhiro Yasui | 03560.003441. | 5244 |

5514 7590 08/24/2006

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NEW YORK, NY 10112

EXAMINER

MAGEE, CHRISTOPHER R

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2627

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---|-------------------------------------|--|
| Office Action Summary | Application No. 10/813,004 | Applicant(s) YASUI ET AL. | |
| | Examiner Christopher R. Magee | Art Unit 2627 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-11 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>6/27/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement(s) (IDS) submitted on 6/4/2004 is/are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statement.

Drawings

3. Figures 4A and 4B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- Claims 1, 2, 5, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishimoto et al. (JP 63-007517).

- Regarding claims 1, 2, 5, 8 and 9, Nishimoto discloses a magnetic recording medium comprising a recording layer and an electrode layer disposed on a substrate wherein the recording layer and the electrode layer are disposed in the same plane [Constitution].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 3 and 6, 7, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimoto et al. (JP 63-007517) as applied to claim 1 above further in view of Kikitsu et al. (hereinafter Kikitsu) (US 6, 602, 620 B1).

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- Regarding claim 3, Nishimoto discloses all the features, *supra*, but does not teach the substrate comprises an insulation material. Kikitsu teaches the substrate comprises an insulation material [col. 13, lines 32-33].

- Regarding claim 6, Nishimoto discloses all the features, *supra*, but does not teach a matrix surrounding magnetic material portions of the recording layer comprises alumina as a constituent provided by anodization of aluminum.

Kikitsu teaches a matrix surrounding magnetic material portions of the recording layer comprises alumina as a constituent provided by anodization of aluminum [col. 7, lines 26-28; Figure 15].

- Regarding claim 7, Nishimoto discloses all the features, *supra*, but does not teach a matrix surrounding magnetic material portions of the recording layer comprises at least one of Si and Ge or an oxide thereof as constituent Kikitsu teaches a matrix surrounding magnetic material portions of the recording layer comprises at least one of Si and Ge or an oxide thereof as constituent [col. 10, lines 5-23].

- Regarding claims 10 and 11, Nishimoto discloses all the features, *supra*, but does not teach a magnetic recording playback device comprising a magnetic recording medium.

Kikitsu discloses a magnetic recording playback device comprising a magnetic recording medium [col. 8, lines 38-57].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the magnetic recording medium of Nishimoto with a recording medium as taught by Kikitsu.

The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to replace the magnetic recording medium of Nishimoto with a recording medium as taught by Kikitsu so that the recording medium will exhibit an improved S/N ratio and achieve a higher density [Kikitsu; col. 4, lines 30-34].

Allowable Subject Matter

6. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon that is considered pertinent to applicant's disclosure has been annotated on PTO-492.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Magee whose telephone number is (571) 272-7592. The examiner can normally be reached on M-F, 8: 00 am-4: 30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

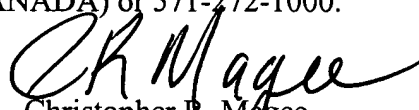
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



ANGEL CASTRO
PRIMARY EXAMINER

August 18, 2006
crm



Christopher R. Magee
Patent Examiner
Art Unit 2627